

REMARKS

Applicants thank Examiner for acknowledging receipt of foreign priority document, Japanese Application No. JP2002-203439, that has been submitted pursuant to 35 U.S.C. § 119.

Applicants respectfully request reconsideration of Examiner's rejection of claims 1 - 4 under 35 U.S.C §103(a). In rejecting claim 1, Examiner states that *Shigeta et al.* (U.S. Patent No. 5,268,781) teaches Applicant's invention in Column 2 line 55 – Column 4 line 52. While *Shigeta* discloses a similar method of manufacture, it fails to recognize the criticality of the range of the thicknesses of the layers, and instead, actually teaches away from Applicant's currently disclosed invention.

More specifically, in Column 4 of the disclosure, *Shigeta* teaches to a layer thickness of 100 – 500 Å for the first layer, and 25 – 50 Å for the second layer. The ratio between the thickness of the second layer and that of the first layer is disclosed in theory to be anywhere from 5 – 50% via Column 4 lines 4 and 22; and in practice is disclosed to be anywhere from 5 – 25% via Table 1 in Column 5.

In contrast, Applicant's invention, however, realizes the advantages of obliquely depositing a second layer that is in the range of 0.25 – 1.25 % the thickness of the first layer. (See page 13 – 14, which discloses the use of a 40nm 1st layer deposition, and a 0.1 – 0.5nm second layer deposition). Doing so achieves a desired result of inorganic alignment films that

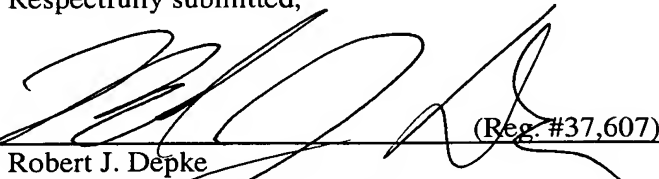
prevent display defects at the time of voltage application, provide a quick response due to a pre-tilt angle of 5 - 12°, and is superior in long-term reliability due to the use of inorganic material that is resistant to light. The desired pre-tilt angle is, as disclosed on Page 14 of Applicant's specification, a result of the critical ratio between the thickness of the first layer and that of the second layer. As disclosed in the Background of the Invention, previous silicon oxide deposition based liquid crystal valves have only been able to realize a pre-tilt angle of either 0° or in the range of 20 - 30°.

Nothing in *Shigeta* teaches or suggests the critical range disclosed in Applicant's invention, and the resultant benefits in pre-tilt angle and transmittance percentage achieved by Applicant's new method and device structure. In fact, *Shigeta* actually teaches away from Applicant's currently claimed invention.

Examiner's remaining references cited but not relied upon, considered either alone or in combination, also fail to teach applicant's currently claimed invention. In light of the foregoing, Applicants respectfully submit that all claims now stand in condition for allowance.

Respectfully submitted,

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